



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,193	11/17/2003	Steve Carl Jamieson Parker	245389US2CRL	9573
22850 7590 05/29/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER NGUYEN, LEE	
			ART UNIT 2618	PAPER NUMBER
			NOTIFICATION DATE 05/29/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/713,193

Applicant(s)

PARKER, STEVE CARL
JAMIESON

Examiner

LEE NGUYEN

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5,6,10,11,13-17,22 and 23 is/are allowed.
- 6) ☒ Claim(s) 1-4,7-9,12,18-21 and 24-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The IDS filed 3/12/07 has been considered and record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-4, 7-9, 12, 18-21 and 24-26 are rejected under 35 U.S.C. 102(b) as anticipated by Chiang et al. (US 2002/0158798).

Regarding claim 1, Chiang teaches a MIMO (the preamble recitation is not given weight) transceiver comprising: an antenna array 130 having a plurality of antennas (fig. 3); and a scattering structure 262 associated with the plurality of antennas configured to receive the signals from the plurality of antennas (figs. 3, 5, 12), and to increase path diversity associated with the transceiver (it is noted that this recitation is intended use).

Regarding claim 2, Chiang also teaches that the scattering structure is a passive structure (integrated 262, 200, para [0052]).

Art Unit: 2618

Regarding claim 3, Chiang also teaches that the scattering property of the scattering structure can be externally adjusted (see [0034]).

Regarding claim 4, Chiang inherently comprising a controller for controlling the scattering structure (electronic scanning and switching, see [0034] and [0052]).

Regarding claim 7, Chiang also teaches that the scattering structure scatters the incident signals by at least one of diffraction, reflection or refraction or use of a waveguide (see [0034]).

Regarding claim 8, Chiang also teaches that the scattering structure is a diffraction grating (see radiates in all direction [0047]).

Regarding claim 9, Chiang further teaches that the scattering structure comprises one or more scattering elements, each associated with one or more of said antennas (figs. 9, 12).

Regarding claim 12, Chiang also teaches a communication system including a transceiver according to claim 1 (see para [0016]).

Regarding claim 18, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Art Unit: 2618

Regarding claim 19, the claim is interpreted and rejected for the same reason as set forth in claim 2.

Regarding claim 20, the claim is interpreted and rejected for the same reason as set forth in claim 3.

Regarding claim 21, the claim is interpreted and rejected for the same reason as set forth in claim 4.

Regarding claim 24, the claim is interpreted and rejected for the same reason as set forth in claim 7.

Regarding claim 25, the claim is interpreted and rejected for the same reason as set forth in claim 8.

Regarding claim 26, the claim is interpreted and rejected for the same reason as set forth in claim 9.

Allowable Subject Matter

2. Claims 5-6, 10-11, 13-17, and 22-23 were allowed.

Response to Arguments

3. Applicant's arguments filed 3/12/07 have been fully considered but they are not persuasive.

In the remarks, Applicant contends that Chang does not teach MIMO (Multiple Input Multiple Output).

In response to applicant's arguments, the recitation MIMO has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Applicant further contends that Chang fails to teach increasing path diversity.

In response to applicant's argument that Chang fails to teach increasing path diversity, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEE NGUYEN whose telephone number is 571-272-7854. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ANDERSON D. MATTHEW can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LEE NGUYEN
Primary Examiner
Art Unit 2618

